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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,875	01/07/2002	Peter S. Mautino	MCT 01501	4951

7590                    07/01/2003

JAMES RAY & ASSOCIATES  
2640 PITCAIRN ROAD  
MONROEVILLE, PA 15146

[REDACTED] EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
3617	

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/041,875

Applicant(s)

MAUTINO ET AL.

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 22 May 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 and 10-16 is/are rejected.
- 7) Claim(s) 7-9 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.      6) Other:

## DETAILED ACTION

### *Specification*

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### *Drawings*

2. The drawings are objected to because:

On page 3, of the amendment, the specification calls for reference number "12" to be a bearing surface area, the drawings do not show this.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawthorne et al (US 5,582,307) in view of Kaufhold (US 3,857,495).

Claims 1, 5-6, 12-16

Hawthorn et al discloses in Figs 1-7 a coupler knuckle casting having an enhanced bearing surface area comprising a tail section (18), a hub section (30) having a pivotable pinhole (16) formed therein with generally straight cylindrical sidewalls, a front face section (24A) connected to said hub section (30), said front face section including a nose section (22) and a pulling face portion (24) formed inwardly from said nose section which includes an enhance bearing (18A) which is substantially arcuate at the corners in a horizontal direction , and a transition section (12) joining said tail section (18) to said hub section (30), said transition section including a top metal section (68) and a bottom metal section (70) extending toward each other, wherein said nose section (22) includes a generally cylindrical opening (36) formed in an end portion thereof, see column 3, lines 26-34, column 5, lines 10-15.

Hawthorne et al disclose all of the features as listed above but fail to disclose a coupler knuckle having a substantially flat portion disposed substantially in a vertical direction and extending for a predetermined distance in a vertical direction in at least a portion of the nose section. The general concept of providing a substantially flat portion disposed substantially in a vertical direction extending for a predetermined distance in a vertical direction in at least a portion of the nose section of a coupler knuckle is well known in the art as illustrated by Kaufhold, see figs. 1-10, abstract section. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hawthorn

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to include the use of a substantially flat portion disposed substantially in a vertical direction and extending for a predetermined distance in a vertical direction in at least a portion of the nose section and the front face portion of a coupler knuckle as taught by Kaufhold in order to prevent formation of an overturning moment force on the coupler knuckle during coupling.

Claims 2-4, 10-11

Regarding using a substantially flat portion extending in the vertical direction in a range between about 3.5 to 7.0 inches, or a range between about 4.0 to 5.5 inches, and an enhanced bearing surface area hardened to at least about 40 Rockwell C as recited in claims 2-4, 10-11, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hawthorne et al to include the use of a substantially flat portion extending in the vertical direction in a range between about 3.5 to 7.0 inches, or a range between about 4.0 to 5.5 inches, and an enhanced bearing surface area hardened to at least about 40 Rockwell C in his advantageous system, as knuckle engagement surface design is a common and everyday occurrence throughout the coupler knuckle design art and the specific use of a substantially flat portion extending in the vertical direction in a range between about 3.5 to 7.0 inches, or a range between about 4.0 to 5.5 inches, and an enhanced bearing surface area hardened to at least about 40 Rockwell C would have been an obvious matter of mechanical expediency depending upon such factors as the loading imposed on the knuckle, the allowable lateral displacement between the coupler, the yield strength of the side knuckle material; the ordinarily skilled artisan choosing the best stress profile corresponding to a

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particular loading imposed on the knuckle which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

***Allowable Subject Matter***

9. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record suggests a coupler knuckle casting having a front face section connected to a hub section, at least a portion of the front face portion and the nose section including an enhanced bearing surface area which includes a substantially flat portion disposed substantially in a vertical direction and which is substantially arcuate in a horizontal direction, said substantially flat portion extending for a predetermined length along said horizontal direction, wherein said predetermined length along said horizontal direction which is substantially arcuate extends over at least a portion of said hub section, said front face section and at least a portion of said nose section in the manner defined in the instant claims 7-9.

***Response to Arguments***

8. Applicant's arguments filed 05/22/03 have been fully considered but they are not persuasive.

A. Summary of applicant's argument

In the amendment, applicant traversed the rejection of claims 1-6, 10-16 for the following reasons:

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1. The reference cited in the rejection, Kaufhold'495, does not show a flat surface which is located on the pulling face and mating nose portion of the knuckle.

B. Response to applicant's argument

1. In response to applicant's contention regarding the fact that the flat surface of Kaufhold is not located on the pulling face and mating nose portion of the knuckle, it must be recognized that the rejection of the claims were a combination rejection not anticipation. The rejection is simply based on the teaching of a flat surface disposed substantially in a vertical direction which is located on the nose section of the coupler knuckle of Kaufhold. Hawthorne et al already show a flat surface on its pulling face which is substantially arcuate in a horizontal direction. Correction has been made to the record to remove the notation of the flat surface located on the pulling face of the teaching reference Kaufhold. An ordinarily skilled artisan would have been motivated to include the teaching of a substantially flat portion disposed substantially in a vertical direction and extending for a predetermined distance in a vertical direction of Kaufhold in at least a portion of the nose section and the front face portion of the coupler knuckle of Hawthorne et al as it establishes a case of *prima facie* case of obviousness.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules  
Examiner  
Art Unit 3617

FFJ

June 27, 2003



S. JOSEPH MORANO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600